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REMARKS

This communication is intended as a full and complete response to the Office Action issued December 29, 2005. In view of the following discussion, the Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. § 103. Thus, the Applicants believe that all of these claims are in allowable form.

I. REJECTION OF CLAIMS 1-6, 9-20 AND 34 UNDER 35 U.S.C. §103

A. Claims 1-4, 6 and 14-17

Claims 1-4, 6 and 14-17 stand rejected as being made obvious by the Lathrop patent (United States Patent No. 5,701,427, issued December 23, 1997, hereinafter "Lathrop") in view of the Chiu et al. patent (United States Patent No. 6,505,253, issued January 7, 2003, hereinafter "Chiu"). The Applicants respectfully traverse the rejection.

The Examiner's attention is directed to the fact that Chiu is an invalid reference as applied to the Applicants' claims 1-4, 6 and 14-17. Specifically, the Chiu patent was filed on June 18, 1999 and claims priority to United States Provisional Patent Application No. 60/091,330, filed on June 30, 1998. The Applicants' invention claims priority to co-pending U.S. Patent Application No. 09/087,799, filed on June 1, 1998. The Applicants submit that all of the limitations of independent claims 1 and 14 are taught by co-pending U.S. Patent Application No. 09/087,799. Therefore, the earliest priority date of the present application (*i.e.*, June 1, 1998), in regards to independent claims 1 and 14, predates the earliest priority date (*i.e.*, June 30, 1998) claimed by the Chiu patent. The combination of Lathrop and Chiu therefore does not render obvious the Applicants' independent claims 1 and 14. Dependent claims 2-4, 6 and 15-17 depend from independent claims 1-14 and recite additional limitations therefor. Accordingly, the combination of Lathrop and Chiu also does not render obvious the Applicants' dependent claims 2-4, 6 and 15-17. Consequently, the Applicants respectfully request that the rejection of claims 1-4, 6 and 14-17 under 35 U.S.C. § 103 be withdrawn.

B. Claims 9-13 and 18-20

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Claims 9-13 and 18-20 stand rejected as being made obvious by Lathrop in view of Chiu. In response, the Applicants have amended independent claims 9 and 18, from which claims 10-13 and 19-20 depend, in order to more clearly recite aspects of the present invention.

In particular, the Examiner's attention is directed to the fact that neither Lathrop nor Chiu teaches, shows or suggests the novel invention of re-attempting to send, by a server in a client/server object-based computing system, a packet of data including data that represents an object in the system to a client in the system, where re-attempts are made up to a predetermined maximum number of times.

By contrast, Lathrop teaches a method in which information items are retransmitted from an information source module (sender) to an information display module (receiver) in response to retransmission requests sent by the information display module. That is, re-attempts to send an information item are not automated or repeated (e.g., once every x seconds until receipt is confirmed or the re-attempt times out), but are singular in response to an affirmative request from the intended recipient.

Chiu, too, teaches a multicast communications method in which a transmitting station in a computer network (i.e., a sender station or a repair head station) may retransmit a message to an intended receiving station (i.e., a member station or a repair head station) if the transmitting station receives a NACK message from the receiving station indicating that the receiving station is missing the message. Chiu, like Lathrop, does not teach, show or suggest, however, that retransmission of a data packet may be attempted up to a predetermined maximum number of times.

Moreover, both Lathrop and Chiu teach general information transfer. Nowhere in Lathrop or Chiu does it teach that a transmitted packet of data includes data which represents an object in a client/server object-based computing system, as positively claimed by the Applicants' invention. The Examiner asserts that this limitation simply means "data or information" in the Office Action dated December 29, 2005. (See Page 3, line 6.) However, contrary to the Examiner's assertion, the Applicants respectfully submit that an object in an object-based computing system is not the same as general "data or information". Objects, as understood in the field of object-oriented computing systems and as specified by the Applicants' specification "are generally programming units which include data and functionality, and are instances of classes". (See

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Applicants' specification, pg. 10, ll. 26-28, emphasis added). Both Lathrop and Chiu teach the transmission of general data, but neither teaches the transmission of objects that include functionality (e.g., methods that operate on data) in addition to data.

Notably, Applicants' claims positively recite the step of re-attempting to send, by a server in a client/server object-based computing system, a packet of data including data that represents an object in the system to a client in the system, where re-attempts are made up to a predetermined maximum number of times. Specifically, Applicants' independent claims 9 and 18 recite:

9. A method for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client, the method comprising:

a) attempting to send the packet of data from the first computing system to the second computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being identified as an object for which the second computing system has an interest in receiving updates;

b) determining when the packet of data is received by the second computing system;

c) identifying the packet of data as being successfully sent when it is determined that the packet of data is received by the second computing system; and

d) assuming that packet losses have occurred when it is determined that the packet of data is not received by the second computing system, wherein assuming that packet losses have occurred includes repeating a) and b) for up to a predetermined maximum number of times. (Emphasis added.)

18. A computer program product for transmitting a packet of data from a first computing system to a second computing system, the first computing system and the second computing system being included in a client/server object-based computing system, wherein the first computing system is a server and the second computing system is a client, the computer program product comprising:

computer code for attempting to send the packet of data from the first computing system to the second computing system, wherein said second computing system is listening, wherein the packet of data includes data which represents an object in the client/server object-based computing system, the object being identified as an object for which the second computing system has an interest in receiving updates;

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computer code for determining when the packet of data is received by the second computing system;

computer code for identifying the packet of data as being successfully sent when it is determined that the packet of data is received by the second computing system;

computer code for assuming that packet losses have occurred when it is determined that the packet of data is not received by the second computing system, wherein assuming that packet losses have occurred includes computer code for re-attempting to send the packet of data from the first computing system to the second computing system and computer code for determining when the re-attempt to send the packet of data is successful for up to a predetermined maximum number of times; and

a computer readable medium that stores the computer codes. (Emphasis added.)

As discussed above, Lathrop and Chiu, singly and in any permissible combination, fail to teach or suggest both the transmission of objects (in an object-oriented computing system) and the re-transmission of objects to an intended recipient up to a predetermined maximum number of times, as claimed by the Applicants. Therefore, the Applicants respectfully submit that independent claims 9 and 18 fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

Dependent claims 10-13 and 19-20 depend, either directly or indirectly, from claims 9 and 18 and recite additional features. As such, and for at least the same reasons set forth above, the Applicants submit that claims 10-13 and 19-20 are also not made obvious by the teachings of Lathrop in view of Chiu. Therefore, the Applicants submit that dependent claims 10-13 and 19-20 also fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Accordingly, the Applicants respectfully request that the rejection of claims 9-13 and 18-20 under 35 U.S.C. § 103 be withdrawn.

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C. Claim 5

Claim 5 stands rejected as being made obvious by Lathrop in view of Chiu and further in view of the Whalen, et al. patent (United States Patent No. 5,948,066, issued on September 7, 1999, hereinafter "Whalen"). The Applicants respectfully traverse the rejection.

Claim 5 depends from claim 1 and recites additional features therefore. As discussed above, Chiu is an invalid reference against the Applicants' invention with regard to claim 1, as all limitations of claim 1 are taught by co-pending U.S. Patent Application No. 09/087,799 (filed on June 1, 1998), which predates the earliest priority date of Chiu (*i.e.*, a U.S. Provisional Patent Application 60/091,330, filed on June 30, 1998) and to which the present application claims priority. Moreover, the Applicants submit that all of the limitations of dependent claim 5 are also taught by co-pending U.S. Patent Application No. 09/087,799. Therefore, the combination of Lathrop, Chiu and Whalen does not render obvious the Applicants' claim 5, because Chiu is an invalid reference as applied to the Applicants' claim 5. Consequently, the Applicants respectfully request that the rejection of claim 5 under 35 U.S.C. §103 be withdrawn.

D. Claim 34

Claim 34 stands rejected as being made obvious by Lathrop in view of Chiu and further in view of the Herz, et al. patent (United States Patent No. 5,835,087, issued on November 10, 1998, hereinafter "Herz"). The Applicants respectfully traverse the rejection.

The Examiner's attention is directed to the fact that Chiu is an invalid reference as applied to Applicants' claim 34. As discussed above, the Chiu patent was filed on June 18, 1999 and claims priority to a provisional application filed on June 30, 1998. The Applicants' invention claims priority to co-pending U.S. Patent Application No. 09/087,799, filed on June 1, 1998. Applicants submit that all the limitations of independent claim 34 are taught in co-pending U.S. Patent Application No. 09/087,799. Therefore, the present application was filed before the earliest priority date (*i.e.*, June 30, 1998) claimed by the Chiu patent. Therefore the combination of Lathrop, Chiu and Herz does not render obvious the Applicants' claim 34 because Chiu is an invalid

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reference as applied to claim 34. Consequently, the Applicants respectfully request that the rejection of claim 34 under 35 U.S.C. §103 be withdrawn.

II. VOLUNTARY AMENDMENTS

The Applicants have voluntarily amended claims 1, 9, 14 and 18 to correct minor typographical errors. The Applicants submit that such amendment does not alter the scope of claims 1, 9, 14 and 18 in any way and that the corrections to the typographical errors were not made in response to the cited prior art.

III. CONCLUSION

Thus, the Applicants submit that all of the presented claims fully satisfy the requirements of 35 U.S.C. §103. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of a final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

3/29/06


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